

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An apparatus, comprising:
 - a first node;
 - a second node coupled to the first node via a first network path;
 - a first processor associated with the first node, the first processor configured to:
 - apply one of a plurality of call admission policies associated with one of a plurality of severity levels, and
 - selectively transmit packets of data to the second node based on a type of data within each packet in accordance with the one of the plurality of call admission policies; and
 - a second processor associated with the second node and configured to:
 - receive a packet of data from the first processor, the packet of data including a condition of the first network path,
 - calculate a different severity level for the first network path based on the condition of the network path, and
 - transmit the different severity level to the first processor, wherein the first processor is further configured to replace the one of the plurality of admission policies with a different one of the plurality of admission policies based on the different severity level.
2. (Previously Presented) The apparatus of claim 1, wherein the severity level is based on a packet delay and a packet loss ratio between the first node and the second node.
3. (Previously Presented) The apparatus of claim 1, wherein the packets of data are associated with a plurality of classes of data, the one of the plurality of call admission policies being configured to block packets of data associated with at least one class of the plurality of classes of data when the severity level is greater than or equal to a predetermined threshold severity level.

4. (Previously Presented) The apparatus of claim 3, wherein the plurality of classes includes a plurality of subclasses, each class of the plurality of subclasses being associated with messages having different bandwidth requirements, the one of the plurality of call admission policies being configured to block packets of data associated with at least one subclass of the class of packets being blocked.

5. (Previously Presented) The apparatus of claim 1, the severity level being a first severity level, the apparatus further comprising:

a third node configured to transmit packets of data to the first node via a second network path; and

a third processor associated with the third node, the first node being configured to receive the packets of data from the third node, the first processor being configured to calculate a second severity level based on a condition of the second network path, and transmit the second severity level to the third node, whereby the third node can apply one of the plurality of call admission policies to regulate the transmission of packets of data from the third node to the first node.

6. (Previously Presented) The apparatus of claim 1, the severity level being a first severity level, the apparatus further comprising:

a third node configured to receive packets of data transmitted from the first node to the third node via a second network path; and

a third processor, the third processor being configured to calculate a second severity level based on a condition of the second network path, and being configured to transmit data associated with the second severity level to the first node, whereby the first node can determine one of the plurality of call admission policies to regulate the transmission of packets from the first node to the third node.

7. (Original) The apparatus of claim 1, further comprising:
a memory device associated with the first node, the memory device being configured to store data associated with at least one of the severity level; a packet delay; the total number of received packets; and a packet loss.
8. (Original) The apparatus of claim 1, further comprising:
a memory device associated with the first node, the memory device being configured to store data associated with a destination list and a source list, the destination list including data associated with packets of data being transmitted from the first node to the second node and the source list including data associated with packets of data being received at the first node.
9. (Currently Amended) A method of maintaining quality of service in a computer network, comprising:
transmitting a first packet of data from a first node to a second node via a network path in accordance with a first call admission policy based on a first severity level for the network path;
receiving the first packet of data at the second node;
determining, by the second node, a second severity level for the network path based on a condition of the network path;
transmitting, by the second node, data associated with the second severity level to the first node;
receiving the data associated with the second severity level at the first node;
comparing, by the first node, the first severity level and the second severity level;
replacing the first call admission policy with a second call admission policy, by the first node, if the first severity level and the second severity level are different severity levels; and
applying, by the first node, the second call admission policy to regulate the transmission of packets of data from the first node to the second node based on a type of data included within the packets of data.
- 10-11. (Cancelled)

12. (Previously Presented) The method of claim 9, further comprising:
applying the second call admission policy to perform one of admit packets of data associated with a previously blocked class of packets and block packets of data associated with a previously admitted class of packets.
13. (Previously Presented) The method of claim 9, further comprising:
transmitting a second packet of data from a third node to the first node in accordance with a third call admission policy based on a third severity level;
receiving the second packet of data at the first node;
determining a fourth severity level based on the second packet of data;
transmitting data associated with the fourth severity level to the third node;
receiving the data associated with the fourth severity level at the third node;
comparing the third severity level and the fourth severity level;
replacing the third call admission policy with a fourth call admission policy if the third severity level and the fourth severity level are different severity levels; and
applying the fourth call admission policy based on the fourth severity level to regulate the transmission of packets of data from the third node to the first node based on a type of data included within the packets of data.

14. (Previously Presented) The method of claim 9, further comprising:
- transmitting a second packet of data from the first node to a third node in accordance with a third call admission policy based on a third severity level;
 - receiving the second packet of data at the third node;
 - determining a fourth severity level based on the second packet of data;
 - transmitting data associated with the fourth severity level to the first node;
 - receiving the data associated with the fourth severity level at the first node;
 - comparing the third severity level and the fourth severity level;
 - replacing the third call admission policy with the fourth call admission policy if the third severity level and the fourth severity level are different severity levels; and
 - applying the fourth call admission policy based on the fourth severity level to regulate the transmission of packets from the first node to the third node based on a type of data included within the packets of data.
15. (Previously Presented) The method of claim 9, further comprising:
- storing data associated with at least one of the first severity level; a packet delay; the total number of received packets; and a packet loss in a memory device associated with the first node.
16. (Original) The method of claim 9, further comprising:
- storing data associated with a destination list and a source list, the destination list including data associated with packets of data being transmitted from the first node to the second node and the source list including data associated with packets of data being received at the first node.

17. (Currently Amended) A computer-readable medium encoded with a computer program, the computer program, when executed by a processor, cause the processor to perform steps comprising code to:

receive data associated with a current severity level in accordance with a first call admission policy, the current severity level being determined at a second node based on a packet of data transmitted from a first node to the second node;

compare the current severity level with a previous severity level for regulating the transmission of packets of data from the first node to the second node;

replace the first call admission policy with a second call admission policy if the previous severity level and the current severity level are different severity levels; and

apply the second call admission policy to regulate the transmission of packets of data from the first node to the second node based on a type of data included within the packets of data.

18. (Currently Amended) The computer-readable medium of claim 17, the computer program further comprising code causing the processor to perform steps to:

calculate a cost function based on a packet of data received from a remote node;

replace one of the current severity level and the previous severity level with an updated severity level; and

transmit the updated severity level to the remote node.

19. (Currently Amended) The computer-readable medium of claim 17, wherein the ~~code~~ computer program causing the processor to apply the second call admission policy ~~comprises code~~ further causes the processor to admit a first class of calls when the current severity level is less than the previous severity level and ~~code for blocking to block~~ a second class of calls when the current severity level is greater than or equal to the previous severity level.

20. (Currently Amended) The computer-readable medium of claim 17, wherein the ~~code~~ computer program causing the processor to apply the second call admission policy ~~comprises~~ further causes the processor to admit calls greater than a predetermined size associated with a predetermined class when the current severity level is less than the previous severity level and ~~code~~ to block calls that will consume less than or equal to a predetermined bandwidth associated with the predetermined class when the current severity level is greater than the previous severity level.

21. (Currently Amended) A method of maintaining quality of service in a computer network where no quality of service information is received from the network, comprising:

transmitting a packet of data from a first node to a second node via a network path in accordance with a first call admission policy based on a first severity level of the network path;
receiving the packet of data at the second node;

determining, by the second node, a second severity level based on a condition of the network path;

transmitting, by the second node, data associated with the second severity level to the first node;

receiving the data associated with the second severity level at the first node;

comparing, by the first node, the first severity level and the second severity level;

replacing the first call admission policy with a second call admission policy, by the first node, if the first severity level and the second severity level are different severity levels; and

applying, by the first node, the second call admission policy to regulate the transmission of packets of data from the first node to the second node based on a type of data included within the packets of data and without using QoS data from the network.

22. (Original) The method of claim 21, wherein maintaining the quality of service includes maintaining the quality of service on a wide area network.

23. (Original) The method of claim 21, wherein maintaining the quality of service includes maintaining the quality of service on a secure network.

24. (Original) The method of claim 23, wherein the quality of service is maintained on a military network.
25. (Original) The method of claim 23, wherein the quality of service is maintained on a commercial network.
26. (Previously Presented) The method of claim 21, wherein applying the call admission policy includes applying a multilevel precedence and preemption policy.
27. (Previously Presented) The method of claim 9, further comprising applying a first call admission policy based on the first severity level to regulate the transmission of the first packet of data from the first node to the second node, wherein the first and second severity levels are different severity levels, the method further comprising applying a second call admission policy based on the second severity level to regulate the transmission of the second packet of data from the first node to the second node.